



**WORLD ENGINEERING DAY 2021- 4<sup>th</sup> March 2021**  
**VENUE: CHANDARIA HALL • UNIVERSITY OF NAIROBI**

**Keynote Speech; Eng. Lucy Wanjiku Mutinda, 1<sup>st</sup> Vice President**

Ladies and Gentlemen all protocols observed,

We have heard about the theme, “Engineering for A Healthy Planet, the sustainable development goals, Engineering with equity and inclusivity, both for young Engineers who are the future, and Women Engineers who are a minority currently at 10%.

As the engineering fraternity, we therefore need, to tangibly figure out, where do we go from here? How do we ensure, the implementation of, the sustainable development goals, is sustained for years and generations to come?

The most urgent question, however, is how do we train a new generation, of young engineers, who will be capable of combining technical excellence, with a deeper appreciation of societal needs and values.

It is therefore paramount, that there is need to identify ways, in which learning institutions, will optimally train, the next generation of engineers, who can help solve, the world's most pressing, economic and environmental challenges. Covid-19 in the year 2020, tangibly demonstrated, that research and innovations, is actually a possibility, within the confines of our universities, having witnessed the Jomo Kenyatta University of Agriculture and Technology (JKUAT) ventilator design.

The young Engineers, in the higher institutions of learning, will require to be trained and mentored, on integrating their designs, innovations and solutions into the society. This involves linking education, to real world projects, production and manufacturing, as well as incorporating real world experiences, into engineering education.

Entrepreneurship training, in addition to Engineering is key, for them to be able to turn, their solutions into successful Tech-enterprises.



Training a new generation, of engineers inclined to sustainable Engineering, demands leadership. It takes getting into things early, including reaching out to children in schools, through outreach and mentorship programs, to motivate them, into Science, Technology, Engineering & Mathematics (STEM).

For the university and College Engineering students, we must seek to challenge them, to explore their potential, in solving complex emerging challenges, by nurturing their critical thinking, increasing scientific literacy, and enabling innovation.

The institution of Engineers of Kenya, is keen on engaging the young engineers, through frequent mentorship sessions, as well as career week engagements, where they can network, and make links with potential opportunities.

Students need also to be involved, in design and hackathon competitions, as well as participate in summits, to solve contemporary prevailing challenges, thus promote engineering leadership, around themes such as, Green energy, water & sanitation, Climate change, health, innovation and infrastructure.

Engineering must also integrate, with other soft skills and subjects such as, communication, project management, leadership, financial basics to ensure future Engineers, are all rounded, to manage complex projects as well as, be able to disseminate their designs and innovations, to the general public for commercialization. Another big challenge, for Engineering profession today, is retention. To ensure young engineers, sustain their interest in engineering, we must constantly demonstrate, to them the impactful role, we engineers play in society and our role in solving practical societal problems, for the well-being of the citizens.



To retain women engineers in the profession, we must strive to strategize and action, the fostering of an ecosystem, that nourishes their interest, talent and intellectual capital. There has to be a deliberate push, to transform the patriarchal spaces, and culture of work in Engineering, and make it more responsive to, and accommodative of women's optimal participation. This can be through special measures e.g. flexible working hours, childcare support, parental leave, shorter work hours in special times, e.g. During nursing babies, and other Leadership growth incentives.

The institution of Engineers of Kenya, is also keen on, promoting gender equity and inclusivity, through the IEK women Engineers chapter. The engagements entail the annual women Engineer's summit, that brings together women engineers, from across the country, to network and exchange ideas. Reaching out to young girls and ladies for mentorship into STEM, is also a core activity of the WEC, through school and university mentorship talks, as well as participation in Mainstream, media talk shows, for sensitisation, encouragement and motivation.

It is a fact, that attracting and supporting more women, in engineering, benefits everyone by increasing the potential, to develop inclusive, innovative solutions, for the complex problems the world is facing. Considering that Women, represent half of the world's population, they are also needed as role models, to inspire more girls as well as boys, to study science and technology-based subjects.

*With those remarks, it is my pleasure to welcome the IEK President Eng, Nathaniel Matalanga to give his keynote...Welcome President*

**ENG. LUCY WANJIKU MUTINDA**

A handwritten signature in black ink, appearing to read 'Lucy Wanjiku Mutinda', written over a white background.

**1<sup>ST</sup> VICE PRESIDENT, INSTITUTION OF ENGINEERS OF KENYA (IEK) (2020-22)**